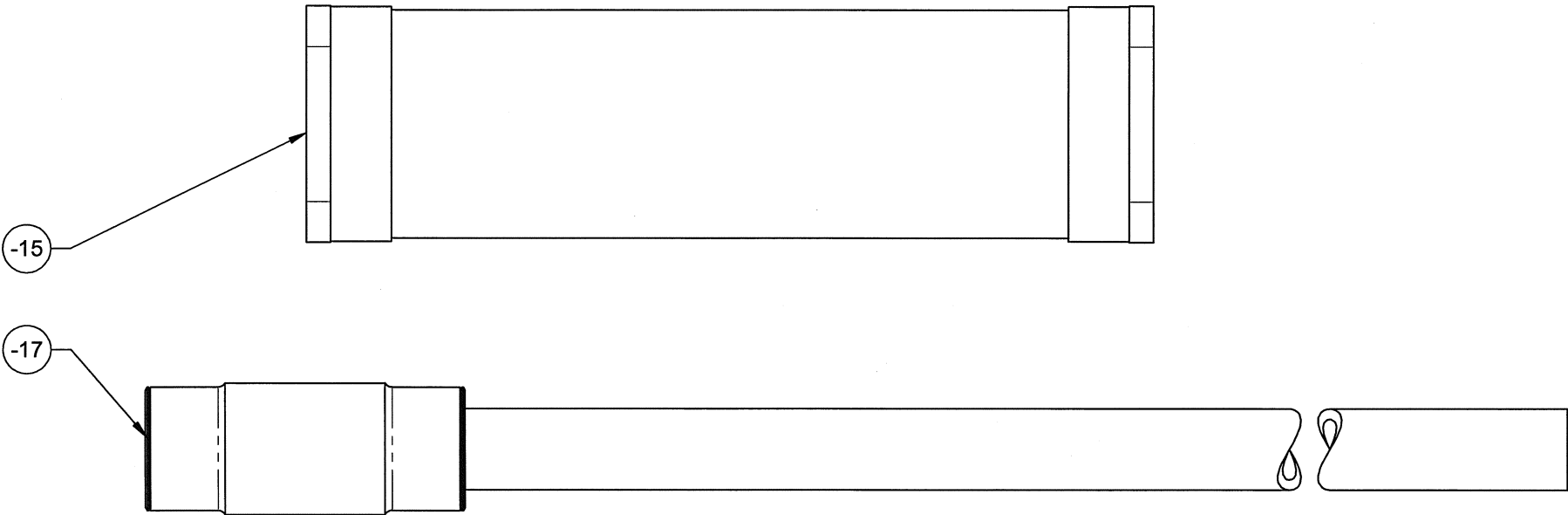


ITEM #	QTY	PART #	PART TITLE
-15	1	RBT18713-15	ENGINE OIL DRAIN TOOL BODY ASSEMBLY
-17	1	RBT18713-17	ENGINE OIL DRAIN TOOL HOSE ASSEMBLY



RBT18713 GEARBOX DRAIN TOOL FOR C40B SERIES

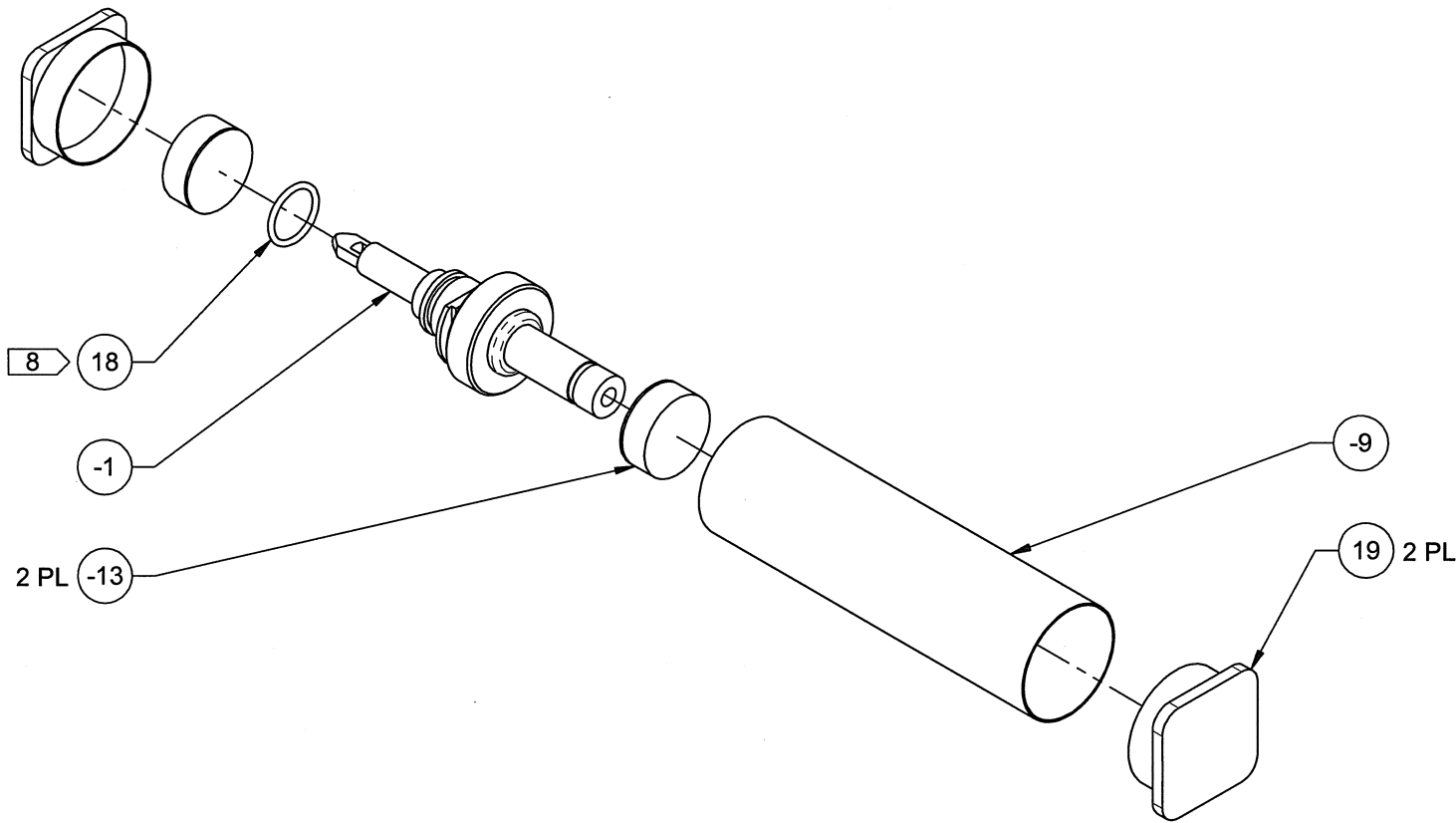
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NOTES:

- 1) MATERIAL: N/A
- 2) HEAT TREAT: N/A
- 3) FINISH: N/A
- 4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
X.XX = +/- 0.01" / +/- 0.5°
X.XXX = +/- 0.005" / +/- 0.1°
X.XXXX = +/- 0.0005" / +/- 0.05°
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/-0.005"
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) IDENTIFICATION: N/A
- 7) ASSEMBLE AS SHOWN
- 8) PLACE ITEM -17 COILED INTO A TIGHT FITTING SEALED PLASTIC BAG WITH ITEM -15

E	SEE PREVIOUS REVISION FOR MORE INFORMATION UPDATED DRAWING TEMPLATE ADDED ITEM -15 & -17 TOOL TITLE WAS ENGINE OIL DRAIN TOOL IS GEARBOX DRAIN TOOL FOR C40B SERIES	19-582	MBB
REV.	DESCRIPTION	ECN #	BY
DESIGN	MBB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	MBB		
CHECKED	KPT	TOOL PART #	REV. E
MFG. APPR.	DP	RBT18713	SHEET 1 OF 6
APPROVED	VP	TITLE	SCALE
DATE	2/27/2019	GEARBOX DRAIN TOOL FOR C40B SERIES	NTS
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ITEM #	QTY	PART #	PART TITLE
-1	1	RBT18713-1	BODY
-9	1	RBT18713-9	TUBE
-13	2	RBT18713-13	FOAM
18	1	McMaster#9464K22 OR EQUIV.	VITON O-RING 5/8" ID. X 3/4" OD. X 1/16" WD.
19	2	McMaster#2044T68 OR EQUIV.	VINYL END CAP FOR 1.36" ID. SHIPPING TUBE



RBT18713-15 ENGINE OIL DRAIN TOOL BODY ASSEMBLY

NOTES:
1) MATERIAL: N/A
2) HEAT TREAT: N/A
3) FINISH: N/A
4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
 X.XX = +/- 0.01" / +/- 0.5°
 X.XXX = +/- 0.005" / +/- 0.1°
 X.XXXX = +/- 0.0005" / +/- 0.05°
 PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/-0.005"
5) UNITS: INCHES UNLESS OTHERWISE NOTED
6) IDENTIFICATION: N/A
7) ASSEMBLE AS SHOWN
8) APPLY MOLYKOTE 55 OR EQUIVALENT ON ITEM 18 THEN ASSEMBLE WITH ITEM -1, AND REMOVE EXCESS

DESIGN	MBB	DART AEROSPACE LTD	
DRAWN	MBB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	TOOL PART #	REV. E
MFG. APPR.	DP	RBT18713	SHEET 2 OF 6
APPROVED	<i>VHP</i>	TITLE	SCALE
DATE	2/27/2019	GEARBOX DRAIN TOOL FOR C40B SERIES	NTS
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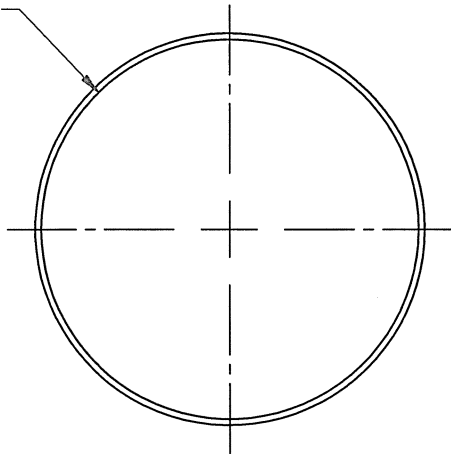
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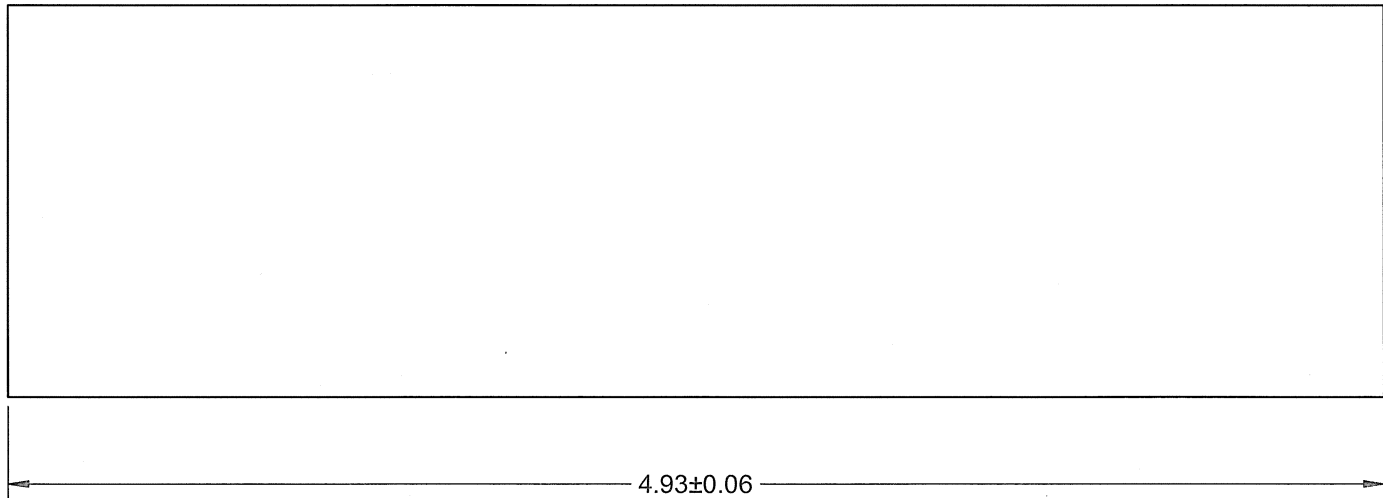
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

RBT18713-9 TUBE



4.93±0.06

NOTES:

- 1) MATERIAL: McMaster#2044T48 OR EQUIV. (POLYETHYLENE ROUND SHIPPING TUBE Ø1.36" ID.)
2) HEAT TREAT: N/A
3) FINISH: N/A
4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
X.XX = +/- 0.01" / +/- 0.5°
X.XXX = +/- 0.005" / +/- 0.1°
X.XXXX = +/- 0.0005" / +/- 0.05°
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/-0.005"
5) UNITS: INCHES UNLESS OTHERWISE NOTED
6) REMOVE ALL SHARP EDGES AND BURRS
7) IDENTIFICATION: N/A

DESIGN	MBB	DART AEROSPACE LTD	
DRAWN	MBB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	TOOL PART #	REV. E
MFG. APPR.	DP	RBT18713	SHEET 4 OF 6
APPROVED		TITLE	SCALE
DATE 2/27/2019		GEARBOX DRAIN TOOL FOR C40B SERIES	NTS 
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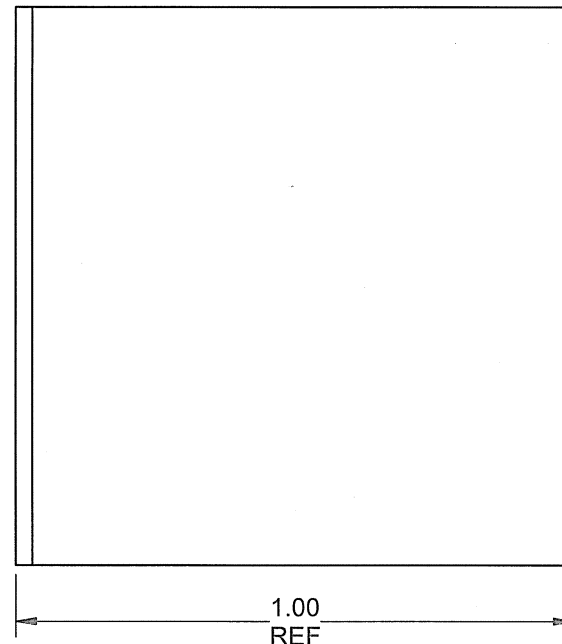
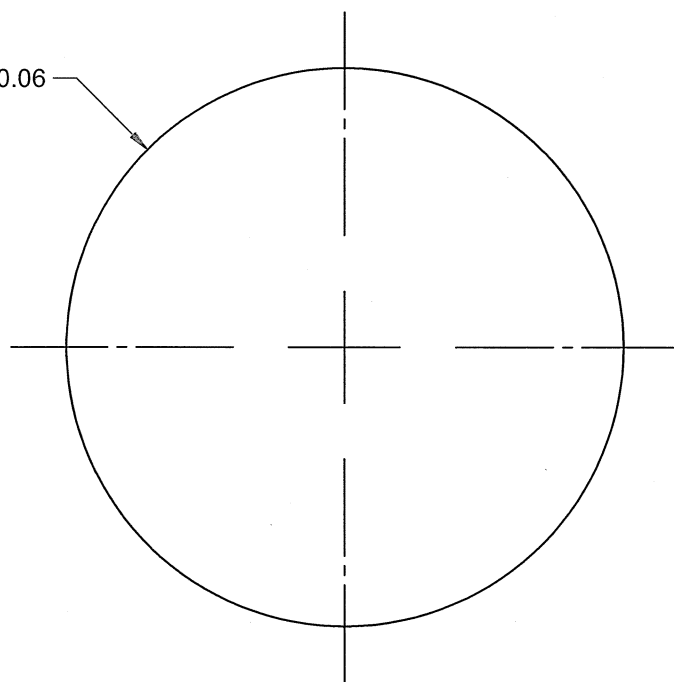
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 $\phi 1.00 \pm 0.06$ **RBT18713-13 FOAM**

NOTES:

1) MATERIAL: NewPig#PAD210 OR EQUIV. (FOAM POLY-BACKED OIL ABSORBENT 1" THK.)

2) HEAT TREAT: N/A

3) FINISH: N/A

4) TOLERANCES: X.X = +/- 0.1" / +/- 1°

X.XX = +/- 0.01" / +/- 0.5°


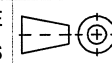
X.XXX = +/- 0.005" / +/- 0.1°

X.XXXX = +/- 0.0005" / +/- 0.05°

PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/- 0.005"

5) UNITS: INCHES UNLESS OTHERWISE NOTED

6) IDENTIFICATION: N/A

DESIGN	MBB	DART AEROSPACE LTD	
DRAWN	MBB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	TOOL PART #	REV. E
MFG. APPR.	DP	RBT18713	SHEET 5 OF 6
APPROVED		TITLE	SCALE
DATE 2/27/2019		GEARBOX DRAIN TOOL FOR C40B SERIES	NTS 
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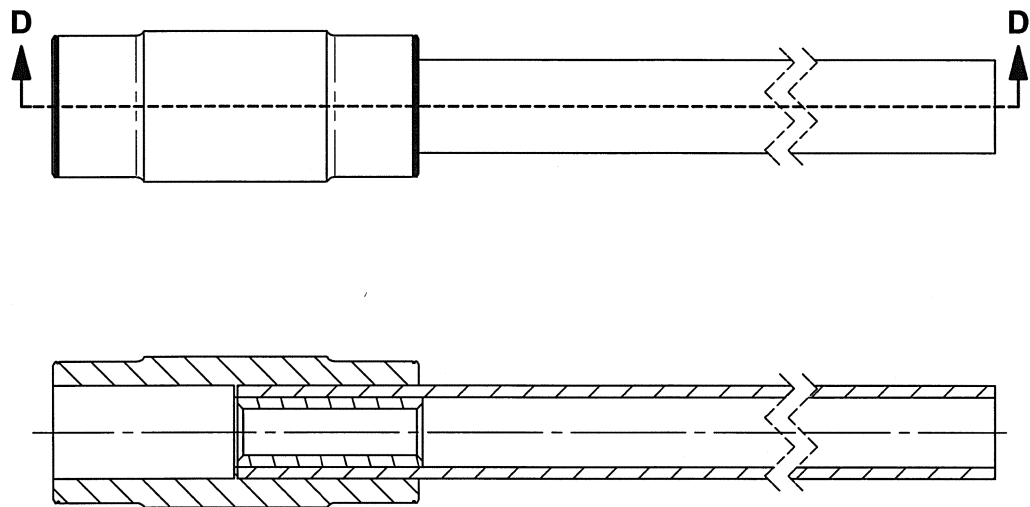
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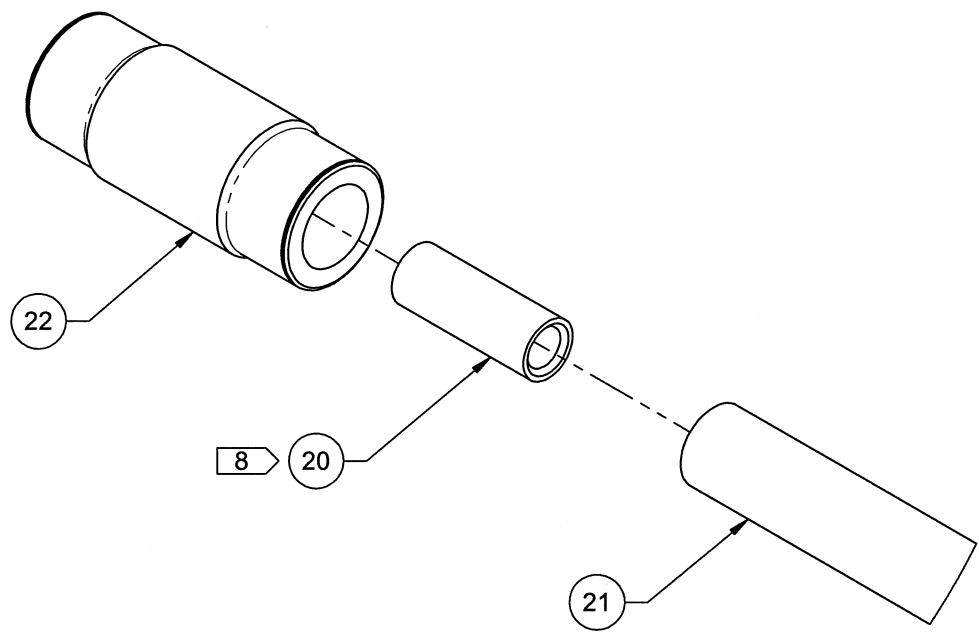
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ITEM #	QTY	PART #	PART TITLE
20	1	DTSP10001	SLEEVE
21	1	Kuri-Tec#K010-0608 OR EQUIV.	CLEAR PVC TUBING 1/2" OD. X 3/8" ID. X 72" LG.
22	1	McMaster#51495K116 OR EQUIV.	NICKEL-PLATED BRASS PUSH-TO-CONNECT 1/2" OD. TUBE FITTING



SECTION D-D



RBT18713-17 ENGINE OIL DRAIN TOOL HOSE ASSEMBLY

NOTES:
1) MATERIAL: N/A
2) HEAT TREAT: N/A
3) FINISH: N/A
4) TOLERANCES: X.X = +/- 0.1" / +/- 1°
X.XX = +/- 0.01" / +/- 0.5°
X.XXX = +/- 0.005" / +/- 0.1°
X.XXXX = +/- 0.0005" / +/- 0.05°
PARALLELISM, ECCENTRICITY AND SYMMETRY ABOUT ALL CENTER LINES = +/-0.005"
5) UNITS: INCHES UNLESS OTHERWISE NOTED
6) IDENTIFICATION: N/A
7) ASSEMBLE AS SHOWN
8) INSTALL ITEM 20 INTO ONE END OF ITEM 21 UNTIL FLUSH

DESIGN	MBB	DART AEROSPACE LTD	
DRAWN	MBB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	KPT	TOOL PART #	REV. E
MFG. APPR.	DP	RBT18713	SHEET 6 OF 6
APPROVED	<i>VP</i>	TITLE	SCALE
DATE	2/27/2019	GEARBOX DRAIN TOOL FOR C40B SERIES	NTS
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